In the Claims

1.-12. (Cancelled)

13. (Currently Amended) A method of decreasing the number, or formation, of intratumoral vessels in a mammal in need thereof comprising administering by ~~direct inoculation and electrotransfer~~ intramuscular or intratumoral injection, followed by application of electric pulses to ~~an~~ a corresponding intramuscular ~~site,~~ or ~~an~~ intratumoral ~~site,~~ injected site(s) in the mammal, a therapeutically effective amount of an expression plasmid coding for ~~the disintegrin domain~~ a therapeutic peptide consisting of ~~the sequence shown in~~ SEQ ID NO: 2 absent any operably linked coding sequence, where the ~~disintegrin domain consisting of the sequence shown in SEQ ID NO: 2~~ therapeutic peptide is encoded by a polynucleotide sequence operably linked to a promoter or expression control sequence and whereby the number, or formation, of intratumoral vessels is decreased.

14.-16. (Cancelled)

17. (Currently Amended) A method of treating a mammal with melanoma ~~in a mammal in need thereof~~ by decreasing the number, or formation, of intratumoral vessels comprising administering by ~~direct inoculation and electrotransfer~~ intramuscular or intratumoral injection, followed by application of electric pulses to ~~an~~ a corresponding intramuscular ~~site,~~ or ~~an~~ intratumoral ~~site,~~ injected site(s) in the mammal, a therapeutically effective amount of an expression plasmid coding for ~~the disintegrin domain~~ a therapeutic peptide consisting of ~~the sequence shown in~~ SEQ ID NO: 2 absent any operably linked coding sequence, where the ~~disintegrin domain consisting of the sequence shown in SEQ ID NO: 2~~ therapeutic peptide is encoded by a polynucleotide sequence operably linked to a promoter or expression control sequence and whereby the number, or formation, of intratumoral vessels is decreased and melanoma in the mammal is treated.

18.-20. (Cancelled)

21. (Currently Amended) A method of treating a mammal with pulmonary metastases ~~in a mammal in need thereof~~ by decreasing the number, or formation, of intratumoral vessels comprising administering by ~~direct inoculation and electrotransfer~~ intramuscular or intratumoral injection, followed by application of electric pulses to ~~an~~ a corresponding intramuscular ~~site,~~ or

~~an~~ intratumoral ~~site,~~ injected site(s) in the mammal, a therapeutically effective amount of an expression plasmid coding for ~~the disintegrin domain~~ a therapeutic peptide consisting of ~~the sequence shown in~~ SEQ ID NO: 2 absent any operably linked coding sequence, where the ~~disintegrin domain~~ therapeutic peptide ~~consisting of the sequence shown in SEQ ID NO: 2~~ is encoded by a polynucleotide sequence operably linked to a promoter or expression control sequence and whereby the number, or formation, of intratumoral vessels is decreased and the pulmonary metastases in the mammal are treated.

22.-24. (Cancelled)

25. (Currently Amended) The method according to claim 13, wherein said polynucleotide sequence ~~encoding the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2~~ consists of ~~the sequence shown in~~ SEQ ID NO: 1.

26. (Currently Amended) The method according to claim 13, wherein said expression plasmid coding for ~~the disintegrin domain~~ a therapeutic peptide consisting of ~~the sequence shown in~~ SEQ ID NO: 2 is administered by ~~direct inoculation and electrotransfer~~ intramuscular or intratumoral injection followed by application of electric pulses to an intramuscular site in the mammal.

27. (Currently Amended) The method according to claim 17, wherein said polynucleotide sequence ~~encoding the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2~~ consists of ~~the sequence shown in~~ SEQ ID NO: 1.

28. (Currently Amended) The method according to claim 17, wherein said expression plasmid coding for the ~~disintegrin domain~~ therapeutic peptide consisting of ~~the sequence shown in~~ SEQ ID NO: 2 is administered by ~~direct inoculation and electrotransfer~~ intramuscular or intratumoral injection followed by application of electric pulses to an intramuscular site in the mammal.

29. (Currently Amended) The method according to claim 21, wherein said polynucleotide sequence ~~encoding the disintegrin domain consisting of the sequence shown in SEQ ID NO: 2~~ consists of ~~the sequence shown in~~ SEQ ID NO: 1.

30. (Currently Amended) The method according to claim 21, wherein said expression plasmid coding for the ~~disintegrin domain~~ therapeutic peptide consisting of ~~the sequence shown in~~ SEQ ID NO: 2 is administered by ~~direct inoculation and electrotransfer~~ intramuscular or intratumoral injection followed by application of electric pulses to an intramuscular site in the mammal.